

SIDA Book Reviews  
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ARDITTI, JOSEPH, Ed. 1990. **Orchid Biology, Reviews and Perspectives**. V. Timber Press, Portland, Oregon. Hardbound \$58.00. 450 pp.

In this fifth volume, Joseph ArditTI continues his excellent task of gathering contributions to orchid biology and culture. First, Frits W. Went, discoverer of auxin, writes "Orchids in My Life." It is an adventure in the history of botany, starting with his auxin discovery, CO<sub>2</sub> studies, through thermoperiodic studies with mention of many explorations and friends in botany, Chapter 2. The Western Australian Fully Subterranean Orchid *Rhizanthella gardneri*, by Kingsley W. Dixon, John S. Pate and John Kuo covers history, habitat, biology and morphology, endophyte and nutrition, seed morphology and germination, comparison to other Australian Achlorophyllous orchids, and conservation suggestions. Chapter 3: Water Relations in Orchids, by Russell Sinclair covers Structure and Function, Water Relations of Tissues, Transpiration, Crassulacean Acid Metabolism in Orchids, Epiphyte Distribution Patterns, and Special Cases. Chapter 4: Auto-Pollination in Orchids, by Paul M. Catling covers Recognition of Self-Pollination and the Use of Terms, Characteristics of Auto-pollinating Orchids, Methods of Auto-Pollination Degree of Auto-Pollination, Phenotypic and Genotypic Control, Occurrence in the Orchid Family, Geographic Aspects, Evolutionary Implications and Taxonomic Implication. Chapter 5: A review of the Genus *Dactylorhiza* by Leonid V. Averyanov covers Anatomy and Morphology of *Dactylorhiza*, flowers, pollen, seeds, chromosomes, taxonomy of Genus *Dactylorhiza*, Hybridization, and Natural History of the Genus *Dactylorhiza* and its species. Chapter 6: Power and Passion: The Orchid in Literature by Martha W. Hoffman Lewis covers orchids in Nineteenth Century England, Orchids in England before World War II, French and German Orchids 1884-1921, Orchids in United States: The Nineteenth Century, Orchids in United States before World War II, and Orchids in Contemporary Literature. Chapter 7: Perspectives of Tropical Orchids In Space Research by Tatyana M. Czerevczenko and Irene V. Kosakovskayoc covers materials and Methods and Results and Discussion. Appendix: Flowering Month of Orchid Species under cultivation by Robert M. Hamilton contains a list of synonyms and their month of flowering months of species under cultivation, a list of 5,594 species. *Dottie M. Woodson*

BATES, DAVID M., RICHARD W. ROBINSON, CHARLES JEFFREY. 1990. **Biology and Utilization of The Cucurbitaceae**. Cornell University Press, 124 Roberts Place, Ithaca, New York, 14850. Hardbound. \$69.50. 485 pp.

This text covers the interrelations of studies on the biology and utilization of cucurbits. It is divided into five parts dealing with systematics and evolution, comparative morphology, sex expression, utilization and crop improvement and protection. There are 36 chapters by reseachers from around the world. This book is well written and includes an appendix of the classification of the Cucurbitaceae including 118 genera and 825 species. *Dottie M. Woodson*